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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,066	02/11/2004	Yu-Ting Shen	MR929-956	1289

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EXAMINER

HERTZOG, ARDITH E

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/775,066

Applicant(s)

SHEN ET AL.

Examiner

Ardith E. Hertzog

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 1-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-6 are pending.

Minor Informalities – Disclosure/Abstract

2. The disclosure is objected to, because of the following minor informalities: At page 5, lines 21-22, it is suggested that "an example follows with reference an appendix containing Figs. 1-9" be revised as "examples follow with reference to Figs. 1-9", for clarity. Appropriate correction is required.
3. The abstract is objected to, because it fails to describe applicant's non-soil-containing embodiment (i.e., per claims 1-3). Inserting "optionally" after "and" at page 10, line 4, would be one means of overcoming this objection. Appropriate correction is required.

Claim Objections

3. Claims 1-6 are objected to, because of the following minor informalities:
 - a. In claim 1 (upon which claims 2-6 ultimately depend), it is suggested that "comprises acts of" be revised as either "comprises steps of" or simply "comprising", for clarity.
 - b. In the preamble of claim 2, "claim" (first occurrence) should be revised as "claimed".

Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Said claims are considered vague, indefinite, and/or confusing, for the following reasons: 1) The preamble of claim 1 currently reads "A method of using high temperature to disintegrate titanyl phthalocyanine"; evidently "plasma" should be inserted after "high temperature". 2) In both claims 2 and 5, "glass" lacks antecedent basis; inserting "glass" after "vitrifying" in claim 1 (at p. 9, line 4) would be one means of overcoming this aspect of this rejection. 3) In both claims 3 and 6, the term "preferred" renders the scope of the claims unclear, since it cannot be determined if the recited temperature range is required or not; deleting "preferred to be" from both claims would be one means of overcoming this aspect of this rejection. Appropriate correction is required.

Allowable Subject Matter

6. Claims 1-6 would be allowable ***if rewritten/amended to overcome 35 U.S.C. § 112, rejection, as well as the claim objections, set forth in this Office action.***

7. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach or to have suggested methods of using high temperature plasma to disintegrate titanyl phthalocyanine (TiOPc), as **specifically**

recited in applicant's independent claim 1. That is, there is no teaching nor suggestion of **disintegrating** the **specific** organic compound, TiOPc, **via the use of high temperature plasma**, comprising the **specific** heating and cooling steps—including the **specific** temperature range—recited in instant claim 1 (upon which instant claims 2-6 ultimately depend). The closest references of record are considered to be US 5,637,127 (McLaughlin et al., hereinafter "McLaughlin") and US Patent Application Publication 2005/0049450 (Shen et al., hereinafter "Shen", available as prior art under 35 U.S.C. § 102(e)). McLaughlin et al. teach plasma vitrification of waste materials, wherein hazardous/radioactive wastes are combined with finely divided glassformers, then subjected to plasma vitrification, followed by solidification (see McLaughlin et al. abstract and claim 1). Although it is stated that the McLaughlin method is particularly applicable "to treatment of mixed wastes, wherein the hazardous component is a toxic organic" (see col. 1, line 66 – col. 2, line 1), there is no teaching nor suggestion of applicant's **specific** "toxic organic"—namely, TiOPc. **Furthermore**, there is no teaching nor suggestion of treatment temperatures which fall within the scope of the range recited in instant claim 1—at best, McLaughlin teaches a **maximum** treatment temperature of 1200°C (see McLaughlin Fig. 2, with corresponding discussion in col. 3; and col. 4, lines 37-38), whereas instant claim 1 **requires** a **minimum** treatment temperature of 1,220°C. Shen teaches a "melting plasma method [(i.e., plasma vitrification)] for treatment of Alq3 organic waste", which comprises heating and cooling steps similar to those recited in instant claim 1, as well as the addition of soil, per instant claim 4 (see Shen et al. abstract and para. [0031]). **However**, the Shen disclosure is

directed **solely** towards "Alq3" (tris-(8-hydroxyquinolinato) aluminum) organic waste, thus there is no teaching nor suggestion of applicant's **specific** "organic waste"—again, TiOPc. **Accordingly**, there would have been **no** motivation for one of ordinary skill in the art to have substituted TiOPc for the organic wastes of either McLaughlin et al. or Shen et al., absent **improper** hindsight use of applicant's disclosure. **Therefore**, instant claims 1-6—if amended/rewritten per paragraph 6. above—would be considered allowable over the prior art of record.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references are considered less material than those discussed above and/or have been cited to show the state of the art, teaching various plasma treatment/vitrification processes of waste materials.

9. Any inquiry concerning this communication should be directed to Ardith E. Hertzog at 571-272-1347. The examiner can normally be reached on Monday through Friday (from about 8:00 a.m. - 4:00 p.m.).

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman, can be reached at 571-272-1358. The central fax number for all communications is now 571-273-8300.


11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. For any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


AEH
August 2, 2005


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